# **Indicators/Remote Displays**

# **IQ plus**® **800** Digital Weight Indicator



PART #	DESCRIPTION
40943	Desktop, 115 VAC
41226	Desktop, 230 VAC
41227	Dual Channel Desktop, 115 VAC
41228	Dual Channel Desktop, 230 VAC
41229	JetPak™ Desktop, 115 VAC†
41230	JetPak™ Desktop, 230 VAC†
23140	Uncased version, 115 VAC
† Not Lega	I-For-Trade U.S./Canada

optional bar graph module.

NOTE: Because A-B Remote I/O and Profibus DP interface with programs written by non-RLWS parties, please consult factory for latest technical updates before quoting.

The IQ plus 800 indicator sets new standards in versatility. With its NEMA 4X stainless steel enclosure, full numeric keyboard, and bright display, this unit can be desk-, panel-, or wall-mounted. This unique indicator powers up to 16 350 $\Omega$  load cells on one or two separately configured scales\*. An optional LED bar graph enhances software capabilities and offers interactive operation for truly flexible performance.

Compatible with Allen-Bradley (A-B) and Profibus DP, the IQ plus 800 provides fast, simple, and accurate measurement and control of complex, multi-ingredient batching and blending\*.

The IQ plus 800 stores up to 200 six-digit truck ID numbers and truck tares, and allows setup in any of six different operating modes, meeting a wide range of truck scale applications. The formattable print tickets for truck weigh-in and weigh-out allow up to 300 characters, and can be set via the EDP port or front keypad.

The IQ plus 800 provides 20 setpoint steps that can be assigned to any of the 4 standard and 12 optional digital outputs. Three digital inputs are also standard. Our exclusive RATTLETRAP® vibration control is ideal for batching applications where scales are subjected to a high degree of industrial vibration.

With the addition of JetPak™, weigh data processing is performed at least five times faster than with conventional meters. At an impressive rate of 100 updates-per-second, this indicator is ideal for high-speed bag filling, checkweighing, and multi-step batching operations. An array of additional hardware and software options offer virtually unlimited solutions for your complex operations.

## **Applications**

- Sophisticated truck in/out management systems
- Multiple-scale operation of up to 2 scales\*
- Material flow control\*
- · High-speed bag filling and checkweighing\*

## **Standard Features**

- NEMA 4X stainless steel enclosure
- Bright, bold Vacuum Fluorescent Display (VFD)
- · Full keyboard for setpoint or fixed tare entry
- · Time and date
- · 20 updates/second, nominal
- Advanced digital filtering, RATTLETRAP® vibration control
- 20 programmable setpoint steps
- Multi-channel accumulators
- 3 digital inputs, TTL or hard contact closure, 4 TTL digital outputs standard, expandable to 16
- Multi-functional 200 ID Truck in/out program, seven characters
- · Selectable print data and format via EDP port or front keypad
- 2 communication ports: (1) EDP port, full duplex RS-232 or 20 mA, (1) printer port, simplex RS-232/20 mA current loop
- Multi-scale control expandable to 2 scale inputs, with individual scale setup\*
- Power for up to sixteen  $350\Omega$  load cells on single or dual channels\*
- Formattable print tickets for Gross, Net, Truck Weigh-In/Weigh-Out, and setpoint push print ticket
- Models with JetPak<sup>™</sup> feature 100 Hz A/D for 100 updates per second, single channel unit<sup>\*</sup>
- · Software initiated Rate of Change, Peak Hold & Password

## **Options/Accessories**

46030 Revolution™ Scale Software***
61138 Dual Range option (combination truck/livestock scale)
35888 Allen-Bradley Remote I/O, 115 VAC (external)
36593 Allen-Bradley Remote I/O, 230 VAC (external)
49974 PROFIBUS® DP Interface, 115 VAC (external)
49975 PROFIBUS® DP Interface, 230 VAC (external)
41932 Panel mount kit
19363 48-segment LED bar graph module,
19357 Analog output module, 0-10 VDC/4-20 mA**
19372 RS-485 serial communication
19374 20 mA full duplex EDP port
19362 12-channel digital setpoint output module
65389 5 VDC power supply for digital output
19369 Batching start/stop switch box
19365 4-channel relay rack, relays sold separately (for externa mounting
30549 2-channel relay rack w/relays (internal mount)
36080 4-channel relay rack w/relays (internal mount)
19373 16-channel relay rack, relays sold separately (for external mounting) (Requires Part #19362 setpoint expander board)
mounting) (Requires Part # 19362 Setpoint expander board)

## I/O relay modules sold separately:

16478 .... Quencharc arc suppressor

15969 ... 10-32 VDC Input relay module (N/O) 15970 ... Dry contact 100 VDC/1.5A output (N/O) 22848 ... Dry contact 100 VDC/1.5A output (N/C) 15971 ... 115 VAC Output relay module (N/O) 15972 ... 115 VAC Input relay module (N/O) 22847 ... 115/230 VAC Output relay module (N/C) 36632 ... 115/230 VAC Output relay module (N/O) 36631 ... 230 VAC Input relay module (N/O)

## 42100 ...... Additional operating manual (Version 3)

- \* This feature is available on specific models. Optional hardware/software may be required to add this feature to existing field units.
- \*\* One analog module per channel (dual scale only). Second analog module must be installed on expansion board.
- \*\*\* Revolution can be downloaded for FREE from the distributor section of our web site at www.rlws.com



IQ plus 800 Specifications

## LOAD CELL EXCITATION:

 $10 \pm 0.5$  VDC,  $16 \times 350\Omega$  load cells (on up to 2 channels)\*

## LOAD CURRENT:

460 mA maximum (16 x 350Ω load cells)

#### INTERCONNECTION CABLE REQUIREMENTS:

6-wire selective (jumpers required on sense leads for 4-wire)

#### ANALOG SIGNAL INPUT RANGE:

0.6 mV/V - 3.9 mV/V

#### ANALOG SIGNAL SENSITIVITY:

0.3 microvolts/graduation minimum Legal-for-Trade recommended minimum 1 microvolt graduation

#### INPUT OVERLOAD:

±12V continuous, static discharge protected

#### **CONVERSION RATE AT FULL SCALE:**

20/second, typical (standard resolution) 10/second, typical (high resolution) Added channels reduce conversion rate per channel\*

#### RESOLUTION:

Selectable up to 100,000 displayed graduations Selectable up to 740,000 graduations internal

#### **UNDERRANGE BLANKING:**

-2 mV signal nominal

#### DISPLAY:

Large .55" (14.0mm) 7-digit, 14-segment blue/green Vacuum Fluorescent Display (VFD)

#### LB/KG SWITCHING:

Front panel pushbutton

## FRONT-PANEL CONTROL SWITCHES:

Zero, Net/Gross, Tare, Units, Print, Disp Accum, Disp R.O.C., Disp Tare, Time/Date, New ID, Scale #, Set Point, Clear

### FRONT-PANEL ANNUNCIATORS:

Lb, Kg, R.O.C., Accum, Push Tare, Keyed Tare, Motion, Center of Zero, Gross, Net  $\label{eq:continuous}$ 

### SERIAL OUTPUT:

"EDP" port, full duplex RS-232 or 20 mA optional "Printer" port, simplex RS-232 and 20 mA current loop

## DIGITAL INPUTS:

3 inputs, TTL or switch closure, active low

## DIGITAL OUTPUTS:

4 outputs standard, TTL active low, expandable to 16

### SETPOINTS:

20 fully-programmable setpoint steps

\* This feature is available on specific models. Optional hardware/ software may be required to add this feature to existing field units.

## **ANALOG FILTERING:**

Software selectable: 2, 8 Hz typical/3 pole, off (25 Hz)

#### **DIGITAL FILTERING:**

RATTLETRAP® high vibration control

#### MOTION TIME SENSITIVITY:

Fixed at 1 second

#### POWER:

Line voltages: 115 or 230 VAC +10%/-15%

Frequency: 50 or 60 Hz

Power consumption: 12 VA with minimum configuration, 30 VA

with all options

Fusing: 0.25A SB (UL/CSA) 5x20mm @ 120V operation 0.125A SB (UL/CSA) 5x20mm @ 240V operation

## **OPERATING TEMPERATURE:**

14°F to 104°F (-10°C to 40°C)

## RATING/MATERIAL:

NEMA 4X stainless steel

## WEIGHT:

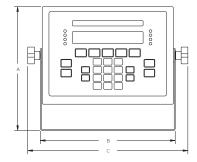
Approximately 14 lb (6.4 kg)

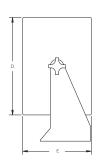
## APPROVALS:

NTEP certified per H-44, at 10,000 Divisions, Class III/IIIL, CC# 92-013A1. Measurement Canada approved, AM-4840; UL listed (control panel only)

### WARRANTY:

One year limited warranty





## **DIMENSIONS**

A = 9.20" (233.7mm)

D = 7.25" (184.2mm)

B = 10.03" (254.8mm) C = 11.91" (302.5mm) E = 5.11" (129.8mm)